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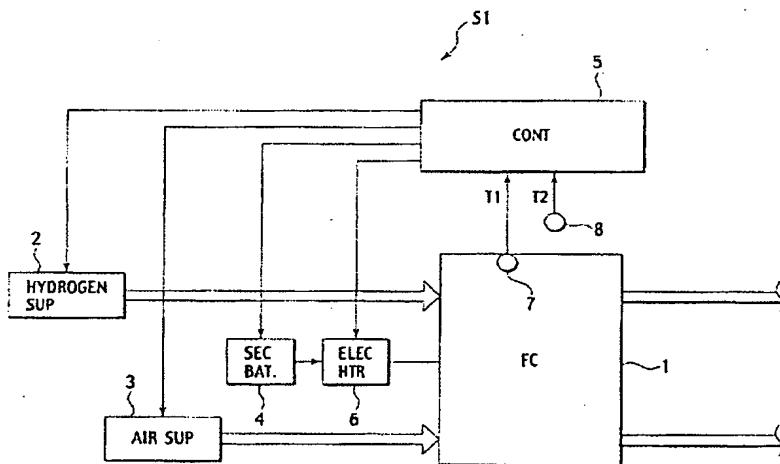
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(57) Abstract: A fuel cell system (S1, S2, S3, S4, S5) includes a fuel cell (1) supplied with fuel and oxidizer to generate electric power, a heating mechanism (6, 31, 32) executing a heating to the fuel cell, a temperature detector (7) detecting a temperature of the fuel cell, and a controller (5) operative to calculate a temperature drop speed of the fuel cell, during a period in which the temperature of the fuel cell is lowering, using the temperature of the fuel cell detected by the temperature detector to control the heating mechanism such that the temperature drop speed is kept equal to or less than a given speed.